

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TENTATIVE ORDER NO. R9-2018-0069

**WASTE DISCHARGE REQUIREMENTS FOR SYCAMORE LANDFILL
SAN DIEGO COUNTY**

Discharges of wastes by Sycamore Landfill Inc. at the Sycamore Landfill are subject to the waste discharge and other requirements set forth in this Order.

Table 1. Discharger Information

WDID	9 000000252
Discharger	Sycamore Landfill Inc., a subsidiary of Republic Services Inc. and Allied Waste Industries
Name of Facility	Sycamore Landfill
Facility Contact, Title, and Phone	Mr. Neil Mohr General Manager Republic Services Inc. (619) 449-9026
Mailing and Billing Address	Mr. Neil Mohr General Manager Sycamore Landfill Inc. 8514 Mast Boulevard Santee, CA 92071

Table 2. Discharge Location

Discharge Point	Discharge Description	Discharge Point (Latitude)	Discharge Point (Longitude)	Receiving Water
Sycamore Landfill	Non-hazardous municipal solid waste	32.858104207174	-117.0291566848	Tributary to San Diego River and groundwater

Table 3. Effective Date

This Order was adopted by the California Regional Water Quality Control Board, San Diego Region and is effective on:	November 14 <u>December 12</u> , 2018
--	--

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on ~~November 14~~December 12, 2018.

David W. Gibson,
Executive Officer

TABLE OF CONTENTS

A.	FINDINGS	4
B.	PROHIBITIONS	6
C.	DISCHARGE SPECIFICATIONS FOR ALLOWABLE WASTES.....	7
D.	CHIPPING AND GRINDING OPERATIONS.....	11
E.	LANDFILL OPERATION SPECIFICATIONS	13
F.	LANDFILL CONSTRUCTION SPECIFICATIONS.....	17
G.	CLOSURE AND POST-CLOSURE SPECIFICATIONS.	23
H.	PROVISIONS.....	24
I.	REPORTING REQUIREMENTS.....	29
J.	DECLARATIONS BY THE SAN DIEGO WATER BOARD.....	36

LIST OF ATTACHMENTS

Attachment A1	Site Location Map	A-1
Attachment A2	Expansion and Development Map	A-2
Attachment B	Monitoring and Reporting Program	B-1
Attachment C	Information Sheet	C-1
<u>Attachment D</u>	<u>Maximum Concentration Limits</u>	<u>D-1</u>
<u>Attachment E</u>	<u>Maximum Concentration Limits (TCLP)</u>	<u>E-1</u>

A. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter **San Diego Water Board**), finds that:

1. DISCHARGER.

The Sycamore Landfill (Landfill) is owned and operated by Sycamore Landfill Inc., a subsidiary of Republic Services Inc. and Allied Waste Industries.

2. LEGAL AUTHORITY.

This Order is issued pursuant to the Water Code (commencing with section 13000) and implements (1) the federal Resource Conservation and Recovery Act (RCRA), including regulations found in the Code of Federal Regulations (CFR), title 40, part 258 (hereinafter 40 CFR 40 part 258 or 40 CFR), adopted by the U.S. Environmental Protection Agency (USEPA) implementing requirements of RCRA Subtitle D; (2) regulations and policies adopted by the State Water Resources Control Board (State Water Board) in titles 23 and 27 of the California Code of Regulations,¹ and (3) applicable provisions of the California Health and Safety Code Division 20, chapter 6.5 (Hazardous Waste Control). Monitoring and Reporting Program (M&RP) No. R9-2018-0069 (Attachment B to this Order) is issued pursuant to Water Code section 13267 which authorizes the San Diego Water Board to require the Discharger to furnish technical and monitoring program reports.

3. RATIONALE FOR REQUIREMENTS.

The San Diego Water Board developed the requirements in this Order based on information submitted as part of the Final Joint Technical Document (JTD) (August 31, 2017), groundwater monitoring reports, water quality control plans and policies, and other available information. An Information Sheet (Attachment C) was prepared for this Order, which contains the background information and rationale for the requirements of this Order. The Information Sheet is hereby incorporated into and constitutes findings for this Order.

4. WATER QUALITY CONTROL PLAN.

The *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. This Order implements the Basin Plan by prescribing waste discharge requirements (WDRs) for the design and construction of containment structures, the disposal of wastes, maintenance, and monitoring of the Landfill. The WDRs ensure

¹ Hereinafter, all references made to titles 23 and 27 within these WDRs will be from the California Code of Regulations.

that wastes contained within the Landfill do not impair the beneficial uses of surface water and groundwater or result in violations of water quality objectives.

5. **CALIFORNIA ENVIRONMENTAL QUALITY ACT.**

Issuance of this Order and M&RP by the San Diego Water Board is a project under the California Environmental Quality Act (CEQA). A final Environmental Impact Report (EIR) for the Master Planned Expansion of the Sycamore Landfill was certified by the City of San Diego on September 20, 2012 pursuant to requirements of CEQA. Detailed findings regarding compliance with CEQA are set forth in the Information Sheet (Attachment C).

6. **ANTIDEGRADATION.**

The San Diego Water Board has considered State Water Resources Control Board (State Water Board) Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, (Resolution No. 68-16) in adopting this Order. The Order requires the Discharger to design, construct, and maintain waste containment systems that prevent discharges of waste and waste constituents to waters of the State. The groundwater monitoring results indicate that legacy releases of landfill gas and leachate from buried wastes in unlined portions of the Sycamore Landfill have impaired beneficial uses of groundwater. As explained in the Information Sheet to this Order, (Attachment C), this Order is consistent with Resolution No. 68-16 because it requires the Discharger to manage waste and waste disposal to prevent degradation of groundwater and to minimize odors and prohibit nuisance conditions.

7. **PUBLIC PARTICIPATION.**

The San Diego Water Board has notified interested agencies, and all interested persons known to the San Diego Water Board, of its intent to prescribe WDRs and a Monitoring and Reporting Program for the Landfill.

8. **APPLICABILITY.**

Order No. R9-2018-0069 supersedes Order No. 99-74, as amended.

IT IS HEREBY ORDERED, that this Order supersedes Order No. 99-74, as amended upon the effective date of this Order. In order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and applicable regulations, it is further ordered that the Dischargers comply with the requirements of this Order. This action does not prevent the San Diego Water Board from taking enforcement actions for past violations of Order No. 99-74. In order to meet the provisions contained in division 7 of the Water Code, and regulations adopted thereunder, the Discharger must comply with the following:

B. PROHIBITIONS

The following types of discharges are prohibited.

1. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in Water Code section 13050.
2. The discharge of waste to land, except as authorized by WDRs or the terms described in Water Code section 13264.
3. The discharge of treated or untreated solid or liquid waste to waters of the United States except as authorized by a National Pollution Discharge Elimination System permit issued by the San Diego Water Board.
4. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives and as authorized by the San Diego Water Board.
5. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit it being transported in the waters, unless authorized by the San Diego Water Board.
6. Any discharge to a storm water conveyance system that is not composed entirely of “storm water,”² unless authorized by the San Diego Water Board.
7. The discharge of waste into a natural or excavated site below historic water levels, unless the discharge is authorized by the San Diego Water Board.
8. The discharge of dewatering-derived effluent, except as authorized by waste discharge requirements.
9. The discharge of dewatered sludges that does not meet the discharge specifications of section C.5 of this order,³ including: primary sludge wastes not containing at least 20 percent solids (by weight), secondary sludge wastes not containing at least 15 percent solids, and all other sludge wastes containing a solids-to-liquids ratio less than 5:1 by weight. Co-disposal of all sludge wastes shall not exceed the initial moisture-holding capacity of the nonhazardous solid waste.

² As defined in title 40 CFR 122.26(b)(13) and 122.26(b)(2).

³ Sludge wastes include dewatered sludges (defined in section 20164, CCR title 27), dewatered sewage or water treatment sludge; including primary sludge, secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge (CCR title 27, section 20220(c)), grit and bar screen wastes.

9.10. The discharge of liquids or semi-solid waste (i.e., waste containing less than 50 percent solids, by weight), shall not be discharged at the Landfill.

~~10.11.~~ Any composting operation on any portion of the landfill, unless authorized by the San Diego Water Board.

C. DISCHARGE SPECIFICATIONS FOR ALLOWABLE WASTES

The following section contains the specifications for allowable waste streams to be disposed of at the Landfill.

1. DESIGNATED DISPOSAL AREAS.

The discharge of wastes shall be confined to the designated disposal areas, including the legacy area and the areas underlain by the liner system prescribed by *Landfill Construction Specifications E.5* of this Order.

2. CHARACTERIZATION OF WASTES.

The Discharger is responsible for the accurate characterization of wastes in compliance with CCR title 27, section 20200(c). Characterization shall include the determination of whether or not wastes will be compatible with containment features and other wastes, and whether or not wastes are required to be managed as designated wastes defined in Water Code section 13173, or hazardous wastes pursuant to CCR title 22, division 4.5, section 66300 *et seq.*

3. NON-HAZARDOUS WASTES.

Only non-hazardous and inert solid wastes, as defined in CCR title 27, sections 20220 and 20230, may be discharged into the Landfill.

4. TREATED WOOD.

Treated wood shall be managed and disposed of in accordance with all the requirements of California Health and Safety Code sections 25143.1.5 and 25150.7.⁴

5. DEWATERED SLUDGE WASTES.

The Discharger must ensure all sludge wastes accepted for disposal at the Landfill meet the minimum moisture content and solids-to-liquids ratio requirements of CCR title 27, section 20220(c). Primary sludge disposed of in the Landfill shall contain at least 20 percent solids (by weight). Secondary sludge, mixtures of primary and secondary sludge, or water treatment sludge disposed of in the Landfill shall contain at least 15 percent solids (by weight). A minimum solids-to-liquid ratio of 5:1 by

⁴ This statute of the California Health and Safety code is repealed as of January 1, 2021. The requirements of this statute are suspended upon repeal of the statute, unless extended by a new statute.

weight shall be maintained in sewage sludge to ensure that the co-disposal of sludge and municipal solid wastes will not exceed the initial moisture holding capacity of the non-hazardous solid waste in accordance with CCR title 27, section 20220(c).

The acceptance of primary sludge waste determined to be a hazardous waste by California Department of Toxic Substances Control (DTSC) is prohibited.

Upon receipt of sludge wastes, the Discharger shall either (1) conduct confirmation sampling for all sludge wastes to determine the moisture content and solids-to-liquids ratio, or (2) retain documentation from the facility generating the sludge wastes that provides a demonstration that the sludge wastes accepted met the Discharge Prohibitions and Specifications of this Order prior to disposal of sludge wastes. The Discharger shall implement a monitoring program for the disposal of sludge, grit and bar screen wastes. The Discharger shall provide the San Diego Water Board with a summary of information about the source(s) of wastewater treatment plant sludge wastes;⁵ the results of analyses to demonstrate compliance with dewatered sludge acceptance requirements in section 20220(c) of CCR title 27, and the weight and types of sludge wastes received from each source for disposal at the Landfill. This information shall be tabulated and reported in the semi-annual monitoring reports required by Monitoring and Reporting Program No. R9-2018-0069.

6. DREDGED SEDIMENTS.

The Discharger must ensure that all wastes accepted for disposal at the Landfill meet the requirements for disposal at a non-hazardous, Class III Landfill. In accordance with CCR title 27, section 20200(d)(3), the Discharger must demonstrate that the acceptance of dredged sediments will not exceed the moisture holding capacity of the Landfill, either initially or as a result of waste management operations, compaction, or settlement.

Upon receipt of dredged sediments, the Discharger shall either (1) conduct confirmation testing to determine the moisture content, or (2) acquire documentation from the source of the dredged sediments that demonstrates that the wastes accepted for disposal meet the Discharge Prohibitions and Specifications of this Order prior to disposal. The Discharger shall implement a monitoring program for the disposal of dredged sediments and provide the San Diego Water Board with a summary of information about the source(s) of dredged sediments,⁶ the results of

⁵ Sludge wastes include dewatered sludges (defined in section 20164, CCR title 27), dewatered sewage or water treatment sludge; including primary sludge, secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge (CCR title 27, section 20220(c)), grit and bar screen wastes. https://www3.epa.gov/npdes/pubs/final_sgrit_removal.pdf

⁶Dredged sediments must meet the criteria for classification as a non-hazardous waste in accordance with CCR title 27, section 20200(c), and the moisture holding capacity as required by CCR title 27, section 20200(d)(3).

analyses undertaken to demonstrate compliance with waste acceptance criteria applicable to the Landfill, and the weight of dredged sediments received from each source for disposal at the Landfill. The Discharger shall retain the results of waste characterization, onsite, for a minimum of five years. These records shall be made available to the San Diego Water Board upon request. This information shall be tabulated and reported in the semi-annual monitoring reports required by Monitoring and Reporting Program No. R9-2018-0069.

6.7. **LANDFILL LEACHATE AND CONDENSATE.**

The discharge of leachate or landfill gas condensate must comply with CCR title 27, section 20340(g), CFR title 40, section 258.28, and the following conditions:

- a. The landfill gas condensate or leachate is returned to the Landfill which produced it; and
- b. Any discharge of leachate or landfill condensate wastes must be into a Landfill cell that is equipped with a prepared foundation or subgrade, and waste containment system including a leachate collection and removal system (LCRS) meeting the requirements ***Landfill Operation Specifications D.9.*** of this Order.

7.8. **CONTAMINATED SOILS.**

The discharge of contaminated soils at the Landfill shall comply with the following:

- a. Samples of waste soils shall be collected in accordance with sampling guidelines set forth in the most recent edition of *“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846* USEPA. At a minimum, for quantities of soil less than or equal to 500 cubic yards, four samples shall be collected per 100 cubic yards of waste soil. For quantities of soil between 500 and 5,000 cubic yards, an additional sample shall be collected for every 500 cubic yards.
- b. Waste soils may be utilized for daily landfill cover if approved for such use by the San Diego Water Board and either the Solid Waste Local Enforcement Agency (LEA), or CalRecycle.
- c. All soil wastes received for disposal at the Landfill must be certified as California non-hazardous wastes pursuant to the criteria found in title 22, Division 4.5.
- d. The Landfill may accept soil wastes containing the following waste constituents: petroleum hydrocarbons, organic and inorganic compounds, metals, and pesticides which could pose a threat to water quality if discharged

in an uncontrolled manner. In addition, those waste soils must also meet all of the following criteria for disposal at the Landfill:

- i. Soil wastes may not contain metals and pesticides, organic and inorganic compounds, in excess of the applicable California hazardous waste concentration limits, as determined using the waste extraction test (WET) per title 22, section 66261.24, as amended.
- ii. Soil wastes may not contain concentrations of metals, pesticides, organic and inorganic compounds in excess of the maximum concentrations of contaminants using the Toxicity Characteristic Leaching procedure (TCLP) analysis per title 22, section 66261.24, as amended.
- iii. State listed hazardous wastes identified in title 22, division 4.5 and federal listed RCRA hazardous wastes identified in CFR title 40, sections 261.31, 261.32, or 261.33 may not be discharged into the Landfill.
- iv. The maximum concentration levels for waste soils containing non-hazardous concentrations of pesticides, organic, and inorganic compounds are contained in **Attachments D and E** to this Order, and shall be used to determine whether waste soils containing the above-referenced constituents are acceptable for disposal.
- v. The following maximum concentration limits shall be used to determine if waste soils containing petroleum hydrocarbons are acceptable for disposal into the Landfill:

Petroleum Hydrocarbon Contaminant	Maximum Concentration Limits	
Gasoline and lighter-end Hydrocarbons (C ₄ -C ₁₂)	1,000 ppm TPH	1,000 – 5,000 ppm TPH w/RCI and 96-hour bioassay
Diesel Fuel, Kerosene Oil, Jet Fuel, and heavy-end Hydrocarbons (C ₈ -C ₂₂)	3,000 ppm TPH	3,000 – 15,000 ppm TPH w/RCI and 96-hour bioassay
Hydraulic Oil, Cutting and Grinding Oil, Virgin Motor Oil, Waste Oil and heavy-end Hydrocarbons (C ₈ -C ₄₀)	3,000 ppm TRPH	3,000 – 15,000 ppm TPH w/RCI and 96-hour bioassay

ppm - parts per million in units of mg/kg

TPH – Total Petroleum Hydrocarbons

TRPH – Total Recoverable Petroleum Hydrocarbons

RCI – Hazardous Waste Criteria for Reactivity, Corrosivity, Ignitability, and 96-hour Acute Bioassay as established by title 22.

8.9. SPECIAL WASTES.

The JTD defines the following special wastes that may be accepted at the Landfill in accordance with the site-specific Operations Plan,⁷ any applicable regulatory requirements, and if the wastes meet the demonstration for classification as a non-hazardous waste:

- a. Dead Animals.
- b. Large Bulky Wastes.
- c. Shredded Tires.
- d. Non-friable Asbestos.
- e. Treated Medical Wastes.
- f. Sandblast grit and other powdery or highly dusty materials.
- g. Auto Shredder wastes
- h. Clean, empty drums or containers that previously contained hazardous materials.

D. CHIPPING AND GRINDING OPERATIONS

The JTD describes chipping and grinding operations⁸ at the Landfill used to divert source separated (at curb-side) green wastes from the municipal solid waste stream. The Discharger proposes to implement its chipping and grinding operations to comply with CalRecycle's Mandatory Commercial Organic Recycling requirements. The requirements for the diversion of reusable wastes are found in Public Resources Code section 41780.02 and are implemented by the LEA through the issuance of the Solid Waste Facility Permit.⁹ The San Diego Water Board supports the Discharger's waste diversion efforts, provided chipping and grinding operations at the Landfill are conducted in accordance with CCR title 14, section 17862.1 et seq. and are protective of water

⁷ Final Joint Technical Document for Sycamore Landfill, August 31, 2017.

⁸ CCR Title 14, section 17852(a) defines a chip and grind operation as an operation or facility that does not produce compost, but mechanically reduces the size of compostable materials.

⁹ A solid waste facility permit is issued by CalRecycle and enforced by the LEA for daily operations of the Landfill and includes requirements for acceptable waste streams, load checking, daily tonnage, landfill gas monitoring, and vector controls.

quality and the beneficial uses of the waters of the State. The Discharger shall comply with the following:

1. DESIGNATED AREA.

The Discharger shall designate an area for its chipping and grinding operation. The chipping and grinding operations area shall be located outside of the active waste disposal area and clearly identified on site maps included in the Annual Summary Report. The designated area shall be designed to prevent, to the maximum extent practicable, ponding, infiltration, inundation, erosion, and meet the following minimum criteria:

- a. If the designated chipping and grinding area is located on native soils within the Landfill footprint, the Discharger shall demonstrate in advance of undertaking operations that the underlying soils have sufficient hydraulic conductivity to act as a barrier between the chipping and grinding operation and groundwater.
- b. If the designated chipping and grinding area is located on a lined waste management unit within the Landfill footprint, the Discharger shall ensure that the area has a minimum of 18 inches of interim cover in place to prevent infiltration of chipping and grinding operation liquids and potential leachate comingling with the underlying waste prism.

2. WATER USE.

Water used in the chipping and grinding operation shall not exceed the amount necessary to reduce immediate dust hazards, produce leachate, or produce runoff from the designated area.

3. INSPECTION AND MAINTENANCE.

The Discharger shall regularly inspect and maintain the designated chipping and grinding area, and provide copies of the inspection reports as an appendix to the Annual Summary Report. Inspections shall be conducted at a frequency that will ensure the chipping and grinding operation does not create or threaten to create a condition of contamination, pollution, or nuisance. If the chipping and grinding operation is located within the Landfill footprint, the operation shall be managed in a manner that maintains the integrity of the existing cover system. The Discharger shall indicate the location of the chipping and grinding operation on a map included in the Annual Summary Report.

4. STORM WATER MANAGEMENT.

The Discharger shall also ensure the chipping and grinding operation is adequately protected from erosion or washout by storm water. The Discharger shall install appropriate BMPs to: (a) prevent storm water run-on from contacting green wastes at the chipping and grinding operation, and (b) to prevent run-off from leaving the

chipping and grinding operations area. BMPs shall be installed prior to the state of the rainy season, ***but no later than October 1st*** of each year.

5. **MANAGEMENT OF CHIPPING AND GRINDING MATERIALS.**

The Discharger shall comply with CCR title 14¹⁰ and remove green wastes from the site within 48-hours of receipt. The LEA has the discretion to extend the green waste removal timeframe requirement for up to seven days. Should the LEA grant an extension, the Discharger shall notify the San Diego Water Board ***within seven days***.

6. **RECYCLED WATER USE.**

All discharges of recycled water at the Landfill must comply with the applicable "Rules and Regulations" that are prescribed by the recycled water producer or purveyor in compliance with the applicable Master Recycling Permit or Water Reclamation Requirements.

E. **LANDFILL OPERATION SPECIFICATIONS**

The following section provides operating specifications for the Landfill.

1. **METHANE AND OTHER LANDFILL GASES.**

Methane and other landfill gases shall be adequately vented, removed from the Landfill, or otherwise controlled to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration of waste constituents through the vadose (unsaturated) zone.

2. **LOAD CHECK PROGRAM.**

The Discharger shall implement an approved load checking program in compliance with CCR title 27, section 20870 and the Landfill's Solid Waste Facility Permit (SWFP), issued by CalRecycle.

3. **WATER USE.**

Water used for facility maintenance shall be limited to the minimum volume of water necessary for dust control and shall only be applied (a) by spraying; (b) on covered areas and not on trash; and (c) in quantities not to exceed those necessary to reduce immediate dust hazards.

¹⁰ CCR title 14, section 17852(a)(10)(A)(2)

4. **VERTICAL SEPARATION.**

The Discharger shall ensure that the liner systems within the waste management units are at least 5 feet above the highest anticipated elevation of the underlying groundwater.¹¹

5. **SURPLUS SOILS.**

The discharge or placement of “surplus soils” (*i.e.*, stockpiled soils associated with landfill construction projects, used in landfill operations, or closure) shall not cause or contribute to the failure of engineered slopes on cut or fill material, or natural ground, or create adverse impacts upon the integrity or performance of the Landfill’s foundation, liner system, waste containment structures, or the structures which control leachate, surface drainage, erosion, or gas.

6. **INDUSTRIAL STORM WATER MANAGEMENT.**

The Landfill shall be adequately protected from any washout or erosion of wastes or cover materials (including daily and interim covers) to maintain the integrity of the containment system and protect receiving water quality and beneficial uses. In addition to the following performance standards, the Discharger must enroll the Landfill in the Statewide Industrial General Permit for Storm Water. The Discharger shall implement a storm water management system designed to control Landfill related runoff from a 100-year, 24-hour storm event.¹² The Discharger shall re-evaluate the definition of a “100-year, 24-hour storm event” every 5 years, and adjust the design and construction of storm water conveyance/containment systems as necessary for new stages/units at the Sycamore Landfill as they are developed. At a minimum, the following measures shall be implemented to manage storm water runoff at the Landfill:

- a. During the rainy season, the Landfill shall be operated and graded to minimize infiltration of precipitation/surface drainage into the Landfill, by implementing measures including, but not limited to, limiting the working face of the Landfill to one day of operation at a time. Any precipitation that falls on the working face of the Landfill and comes into contact with the waste (contact water) shall be treated as leachate and discharged in accordance ***Discharge Specifications for Allowable Wastes C.6.***
- b. Storm water runoff resulting from precipitation that falls within the boundary of the Landfill but does not come into contact with wastes, shall be collected by a system of berms, ditches, downchutes, swales, and drainage channels, and

¹¹ CCR title 27, section 20240(c)

¹² The size of a rain event identified as a “100-year storm event” (recurrence interval) changes with time. The Discharger should re-evaluate the size of a “100-year storm event” every 5 years or as part of the analysis provided in the Design Report for each new cell. USGS: <https://water.usgs.gov/edu/100yearflood.html>

shall be diverted off the Landfill into the desiltation basins without coming into contact with any waste.

- c. Annually, prior to the anticipated rainy season, but no later than **October 1st**, the Discharger shall implement any necessary erosion control measures, and shall complete any necessary construction, maintenance, or repairs of precipitation and drainage control facilities to prevent erosion, ponding, flooding, or to prevent surface drainage from contacting or percolating through wastes at the Landfill. This specification shall not preclude the Discharger from performing maintenance and repairs necessitated by changing site conditions at any time during the rainy season. An annual report describing measures taken to comply with this specification shall be received by the San Diego Water Board office no later than **5:00 pm on January 30th** of the following year.
- d. The desiltation basins shall be designed and constructed according to the findings presented in the Hydrology Study of the Final JTD¹³ or in an update included in a Design Report for each new stage/unit, as approved by the San Diego Water Board. At a minimum, basins shall be designed to contain peak surface water flows associated with a 100-year, 24-hour storm event, as defined by the most recent evaluation of the recurrence interval and severity of a “100-year, 24-hour” storm event.
- e. Sediment from the desiltation basins shall be removed whenever the volume of the basin has been reduced by 25 percent of the basin’s design capacity.
- f. Surface water drainage from tributary areas and internal site drainage from surface and subsurface sources shall not contact or percolate through any waste, and shall either be contained onsite or be discharged in compliance with applicable storm water regulations.
- g. Storm water management facilities shall be constructed and maintained to effectively divert sheet flow runoff laterally, or via the shortest distance, into the drainage and collection facilities.
- h. The Discharger shall not allow the accumulation of storm water (i.e., ponding) or accumulation of groundwater, to cause or contribute to adverse impacts upon the integrity of the Landfill’s foundation, liner system, or the structures which control leachate, storm water drainage, erosion, or landfill gas.
- i. Where storm water flows result in erosive flow velocities, erosion control materials shall be used for protection of drainage conveyance features.

¹³ Final Joint Technical Document for Sycamore Landfill, August 31, 2017.

Effective erosion control BMPs shall be implemented on side slopes and interim bench ditches to control erosion when necessary.

- j. Where high storm water flow velocities occur at terminal ends or downchutes, or where downchutes cross access roads, effective erosion control BMPs shall be implemented.
- k. The Landfill cover shall be maintained to minimize percolation of liquids through wastes.

9.10. **LEACHATE COLLECTION AND REMOVAL SYSTEM.**

The following measures shall be implemented for the Leachate Collection and Removal System (LCRS) at the Landfill.

- a. The LCRS shall function without clogging throughout the life of the Landfill, including the post-closure maintenance period. The Discharger shall perform annual test of the LCRS to demonstrate proper operation. Results of the annual testing shall be compared with earlier tests, made under comparable conditions in accordance with CCR title 27, section 20340(d), and reported in the annual groundwater monitoring report.
- b. Leachate production from the LCRS shall not exceed 85 percent of the design capacity of the LCRS. If leachate generation exceeds this value, then the Discharger shall immediately cease the discharge of sludge and other high-moisture wastes to the Landfill, and notify the San Diego Water Board in writing ***within seven days***. Notification shall include a timetable for a corrective action necessary to reduce leachate production.
- c. The depth of fluid in any LCRS sump shall be kept at or below six inches, the minimum needed to ensure efficient pump operation.
- d. Landfill leachate shall be discharged to an appropriate onsite or offsite liquid waste management facility in compliance with all applicable federal, State, and local requirements.
- e. The Discharger shall note, in each semi-annual monitoring report, the total volume of leachate collected each month since that previous semi-annual monitoring report, in compliance with CCR title 27, section 20340(h). The leachate collection data shall be tabulated and reported in each semi-annual monitoring report.

10.11. **PROTECTIVE COVER SOIL PLACEMENT.**

The protective cover soil (PCS) shall be placed up the side slopes incrementally during operation of the Landfill. The two-foot thick layer must be placed to maintain

interim stability conditions. Placement of the PCS on sideslopes shall not compromise the integrity of any components of the composite liner system.

F. LANDFILL CONSTRUCTION SPECIFICATIONS

The following section provides design and construction specifications for the lateral and vertical Landfill expansion areas, (Stages V – XIV), authorized by this Order.

1. LANDFILL EXPANSION.

This Order establishes the requirements for a 28.6-acre lateral expansion increases the footprint from 324 acres to 352.6 acres, and incorporates the former SDG&E powerline corridor. The 28.6-acre expansion area fills in the Landfill footprint, allowing for additional lateral expansion areas to be developed within the 352.6 footprint authorized by this Order. The expansion of the Landfill shall be completed in ten stages (Stages V – XIV), based upon information presented in the August 2017 JTD or subsequent revisions (See Attachment A2).

2. DESIGN AND CONSTRUCTION OF PRECIPITATION AND DRAINAGE CONTROLS.

At a minimum, the precipitation and drainage control system shall be constructed to accommodate peak flows from surface water runoff from a 24-hour storm event, with a 100-year return frequency in accordance with CCR title 27, section 20260(c), and Table 4.1.¹⁴ The Discharger shall use the most recent evaluation of the recurrence interval and severity of a “100-year, 24-hour” storm event to develop the design of the precipitation and drainage control system. All diversion and drainage facilities shall be designed, constructed, and maintained to meet the required performance standards of CCR title 27,¹⁵ and consider the following:

- a. The expected final contours for closed portions of the Landfill, including the planned drainage pattern.
- b. The drainage pattern for operating portions of the Landfill at any given time.
- c. The possible effects of the Landfill’s drainage pattern on the regional watershed, and the possible effects of the regional watershed’s drainage patterns on the Landfill.
- d. The design capacity of the drainage systems of downstream and adjacent properties by providing for the gradual release of retained storm water downstream in a manner that does not exceed the expected peak flow rate at the point of discharge as if the Landfill were not constructed.

¹⁴ Table 4.1 “Construction Standards for Units” found in CCR title 27.

¹⁵ See CCR title 27, section 20365(c) – “Performance Standards.”

3. LINER MATERIALS.

Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the Landfill

4. FOUNDATION/SUBGRADE.

The following measures shall be implemented to maintain the integrity of the foundation or subgrade of the Landfill:

- a. The Landfill shall have a foundation or base layer capable of providing support for the structures and capable of withstanding hydraulic pressure gradients to prevent failure or settlement, compression or uplift, and all effects of ground motions resulting from the Maximum Credible Earthquake (MCE); as certified by either a California licensed civil engineer or a certified engineering geologist in accordance with CCR title 27, section 20420(d).
- b. The subgrade shall be rolled to a smooth and level surface. The surface of the subgrade shall be free of stones greater than 3-inches in diameter, organics, and other deleterious materials.

5. LINER SYSTEM.

The liner system described below shall be constructed for all future stages of development at the Landfill.

- a. Basal Liner Design (from bottom to top):
 - i. Prepared subgrade consisting of six inches of soil materials rolled to a smooth and uniform surface.
 - ii. Double-sided textured, 40-mil high density polyethylene (HDPE) flexible membrane.
 - iii. Geosynthetic clay layer (GCL).
 - iv. Double-sided textured, 60-mil HDPE flexible membrane.
 - v. 16-ounce nonwoven geotextile.
 - vi. 12-inch leachate collection and removal system (LCRS) gravel layer.
 - vii. 8-ounce nonwoven geotextile.
 - viii. Two feet of protective cover soil.
- b. Side Slope Liner Design (from bottom to top):

- i. Prepared subgrade consisting of six inches of yellow fill soil materials rolled to a smooth and uniform surface.
 - ii. Double-sided textured, 40-mil HDPE flexible membrane.
 - iii. GCL.
 - iv. Single-sided (textured side down) 60-mil HDPE flexible membrane with a fuse layer to armor the side-slope liner system. The fuse layer will consist of a high-strength geotextile placed along the crest of each bench, ballasted in place until anchored by waste.
 - v. 8-ounce nonwoven geotextile.
 - vi. Two feet of protective cover soil.
- c. The Discharger shall ensure that the required liner system covers all native geologic materials that are likely to be in contact with waste (including landfill gas or leachate) in accordance with CCR title 27, section 20330(d).
- d. The Discharger shall ensure that the junction(s) between the bottom liner system components and side slope liner components (at the base of the slopes), the junction between the side slope liner system and the anchor trenches/tie-downs (at the top of the slopes), and the junctions between adjacent panels of geosynthetic materials are constructed in a manner that do not:
 - i. Provide a pathway for the migration and release of wastes, waste constituents, or degradation products (leachate, landfill gas, etc.).
 - ii. Cause, threaten to cause, or contribute to adverse impacts upon the Landfill's ability to contain waste constituents; or the integrity and performance of the Landfill's foundation, liner system, or the structures which control leachate, storm water drainage, erosion, or gas.
- e. Geomembranes used in the liner system shall meet the following minimum performance requirements:
 - i. Be designed and constructed to contain the fluid, including landfill gas, waste, and leachate as required by CCR title 27, sections 20240 and 20310, and limit infiltration of liquid to the greatest extent possible.
 - ii. Control landfill gas emissions.
 - iii. Be stable under the range of stresses and ambient environmental conditions at the site.

- iv. Have a service life that extends throughout the post-closure maintenance period and for as long as the wastes pose a potential threat to water quality.

6. SIDE SLOPE ARMORING.

To counteract the effects of down-drag from the potential slumping of wastes on steep side slopes, the Discharger shall armor the side slope liner system with a fuse layer. The fuse layer shall consist of a high-strength geotextile placed along the crest of each bench, ballasted in place until anchored by waste.

7. LINER MATERIALS CONFORMANCE TESTING.

Prior to the start of construction, the Discharger shall perform conformance testing on all the synthetic materials to be used in the liner system of all future expansion areas. The results of conformance testing of synthetic materials shall be evaluated as follows:

- a. If the material strengths are greater than or equal to the strength parameters used in the design and slope stability analysis of the expansion Unit, then the synthetic materials are deemed to be consistent with the value of strength parameters used in the design and slope stability analysis.
- b. If the material strength parameters measured during conformance testing are less than the strength parameters used in the design and slope stability analysis, the Discharger shall postpone construction activities and re-run the slope stability analysis using the measured strength parameters from the conformance testing. The revised slope stability analysis(es), including all tabulated revised strength parameters, shall be provided to the San Diego Water Board in a final Report for review and comment prior to the commencement of any further construction activities.

8. CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL.

The following measures shall be implemented to ensure that the construction quality assurance/quality control requirements found in State¹⁶ and federal¹⁷ regulations are achieved:

- a. The Landfill containment structures shall be designed and constructed under the direct supervision of a California licensed civil engineer or a certified engineering geologist in accordance with CCR title 27, sections 20324(b)(1) and 20310(e), and shall be certified by that individual as meeting the prescriptive standards (except where exempt or approved as an engineered alternative design herein) and the applicable performance goals of CCR title 27. In the case of an engineered alternative to a prescriptive construction standard, the licensed civil engineer or certified engineering geologist must

¹⁶CCR Title 27, section 20320, 20323, 20324, 20330, 20340, 20365, 20370

¹⁷ 40 CFR, part 258.40 *et seq.* (Subtitle D)

certify that the Landfill has been constructed in accordance with approved plans and specifications. All design documents shall include a Construction Quality Assurance Plan (CQA Plan), for the purpose of:

- i. Providing a demonstration that the Landfill has been constructed according to the specifications and plans approved by the San Diego Water Board.
 - ii. Providing quality control on the material and construction practices used to construct the Landfill and preventing the use of inferior products and/or materials that do not meet the approved design plans and specifications.
- b. Hydraulic conductivity of soils used in containment structures, as determined through laboratory methods (CCR title 27, section 20320), shall be confirmed using applicable field-testing methods (CCR title 27, section 20324 *et seq.*) and the results shall be submitted to the San Diego Water Board in the final CQA Report, prior to the placement of waste in the Landfill.
- c. After completing installation of the LCRS gravel, and prior to deployment of subsequent liner components, the Discharger shall:
- i. Complete an electrical leak location survey (ELLS), to check the integrity of all bottom liner areas covered by the geosynthetic membrane component.
 - ii. Take necessary steps to identify and repair all defects located in the geosynthetic membrane component.
 - iii. Include the results from the ELLS and any repairs to the geosynthetic membrane in the relevant CQA Report including: text discussion of filed activities; daily logs of defect repairs; results from all testing performed to assess the integrity of patches/repairs made to the geosynthetic membrane; supporting photographs of all defective areas and repairs made to the geosynthetic membrane component; and a separate site plot plan indicating the location(s) of all defects/repairs performed for each geosynthetic membrane layer. These site plot plans shall be made to the same scale to facilitate comparison between geosynthetic membrane layers.
- d. The Discharger shall provide the San Diego Water Board with an acceptable Final Design Report, including a technical demonstration that the proposed sideslope liner design can be constructed and remain stable and functional on: (1) the interior cut slopes of the Landfill, and (2) in areas where the composite liner overlaps wastes in the legacy area of the landfill, where applicable.

- e. A technically qualified third party, independent of both the Discharger and the construction contractor, shall perform all the construction quality assurance monitoring and testing during the construction of the liner system. The third party shall certify that the liner system was constructed in compliance with all applicable plans and engineering specifications.
- f. The Discharger shall perform visual post-construction CQA for the placement of PCS on side slopes once construction of the underlying liner components is complete, as well as each subsequent placement of PCS during the operational life of the lined unit/cell at the Landfill.
- g. The Final Construction CQA Report shall be submitted to the San Diego Water Board for review and comment prior to the Board's final construction certification inspection of the expansion area.

9. **LEACHATE COLLECTION AND REMOVAL SYSTEM.**

The following measures shall be implemented to ensure proper construction of the LCRS for the Landfill:

- a. All containment systems shall include a LCRS that will effectively convey all leachate that reaches the liner, to a lined sump or other lined collection area.
- b. Materials used to construct the LCRS shall have appropriate physical and chemical properties to ensure the required transmission of leachate/liquid over the operational life of the Landfill and throughout the post-closure maintenance period.
- c. The LCRS shall be design, constructed, and maintained to collect twice the anticipated daily volume of leachate generated by the Landfill, and to ensure there is no build-up of hydraulic head on the underlying liner in accordance with CCR title 27, section 20340(c).
- d. The LCRS gravel shall be overlain by an 8-ounce/square yard nonwoven geotextile fabric layer to prevent clogging of the LCRS by the PCS.

10. **PROTECTIVE COVER SOIL.**

The PCS shall meet the following minimum requirements:

- a. Provide protection to the underlying liner components during initial waste placement into the lined expansion area, and allow the percolation of liquid (*i.e.* leachate and storm water) into the underlying LCRS. The PCS shall prevent the build-up of hydraulic head on top of this layer in excess of 12-inches, and shall not cause a discharge of leachate or storm water in the form of a seep on exposed faces, or into unlined areas of the Landfill.

- b. Be free of debris, roots, scrap material, asphalt, concrete, vegetation, untreated refuse, and other deleterious or objectionable material.
- c. Be comprised of soils materials that are considered suitable for use as follows:
 - i. For use with a 16-ounce/square yard geotextile, the PCS shall have a minimum laboratory permeability of 2×10^{-3} centimeters per second (cm/sec) or greater.
 - ii. For use with a geocomposite (side slope only), the PCS shall have an average laboratory permeability of 1×10^{-4} cm/sec or greater.
 - iii. For an equivalent engineered alternative design, the PCS shall have a minimum laboratory permeability greater than a barrier layer (no less than 1×10^{-5} cm/sec) as defined in 40 CFR part 258.60. Any engineered alternative design must be approved by the San Diego Water Board prior to construction.
- d. Be free of asphalt, concrete, limestone, or other material that could adversely react with landfill leachate.

11. LANDFILL INTERMEDIATE COVER.

Landfills with intermediate covers¹⁸ which have been or will be exposed for longer than two years from the time the intermediate cover was installed, shall have a minimum of two-feet of soil cover maintained over the Landfill unit or cell. All intermediate cover(s) shall be designed and constructed to minimize percolation of liquids through wastes in accordance with CCR title 27, section 20705.

G. CLOSURE AND POST-CLOSURE SPECIFICATIONS

1. CLOSURE AND POST-CLOSURE MAINTENANCE.

The Discharger shall comply with all applicable requirements of CCR title 27, Subchapter 5, article 2 for the Closure and Post-Closure Maintenance of the Sycamore Landfill.

2. USE OF LICENSED PROFESSIONALS.

The closure of the Sycamore Landfill shall be in accordance with CCR title 27, section 21710(d), and conducted by, or under the direct supervision of, a California licensed civil engineer or certified engineering geologist.

3. FINAL COVER.

At closure, the Sycamore Landfill shall receive a final cover, which shall be designed and constructed to function with minimum maintenance, and shall consist of, at a

¹⁸ As defined in CCR title 27, section 20700

minimum, a two-foot thick foundation layer (which may incorporate the interim soil cover), a two-foot thick compacted soil layer having a minimum permeability of 1×10^{-5} cm/sec or less with a relative compaction of approximately 90 percent, and not less than a one-foot thick vegetation layer or an engineered equivalent final cover approved by the San Diego Water Board pursuant to CCR title 27, sections 20800(b) and (c).

4. FINAL COVER GRADING.

At closure, all portions of the final cover shall have a slope of at least three percent and the cover shall be graded to promote sheet flow, and maintained to prevent ponding and infiltration of surface water.

5. PRECIPITATION AND DRAINAGE CONTROLS.

Cover materials shall be graded to divert precipitation from the Landfill, to prevent ponding of surface water over wastes, and to resist erosion as a result of precipitation events with a return frequency for a 24-hour, 100-year storm event. Any drainage layer in the final cover shall be designed and constructed to intersect with the final drainage system for the Landfill in a manner resisting erosion from the design storm event and promoting free drainage from all portions of the cover in accordance with CCR title 27, sections 20365(c), 20365(d) and 20365(f).

6. POST-CLOSURE MAINTENANCE PERIOD.

The post-closure maintenance period shall continue until the San Diego Water Board determines that the remaining wastes in the Landfill no longer have the potential to threaten water quality pursuant to CCR title 27, section 20950(a)(2)(A)(2).

7. COVER VEGETATION.

Vegetation used at the Landfill shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of the Landfill cover or containment structures, and shall meet the requirements of CCR title 27, section 21090(a)(3)(A)(1).

H. PROVISIONS

1. GENERAL PROVISION.

The discharge of wastes shall at all times be in conformance with applicable State and federal regulations, water quality standards, including but not limited to, all applicable provisions and prohibitions contained in the Basin Plan, including beneficial uses, water quality objectives, and implementation plans. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or other State or local agencies to prohibit, restrict, or control discharges of waste subject to their jurisdictions.

2. DUTY TO COMPLY.

Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for: (a) enforcement action; and (b) termination, revocation and re-issuance or modification of this Order.

3. CORRECTIVE ACTION.

The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

4. FINANCIAL ASSURANCES FOR CLOSURE, POST-CLOSURE MAINTENANCE, AND CORRECTIVE ACTION.

The Discharger shall update the financial assurances, every five years, to ensure that adequate funds are available, to cover the cost of closure, post-closure monitoring and maintenance, and corrective actions in response to a reasonably foreseeable release from the Landfill.

The Discharger shall ensure that the selected financial assurances instrument(s) meet the following minimum criteria:

- a. If the Discharger is not required, or does not maintain current and adequate financial assurance mechanisms with CalRecycle as the beneficiary, in accordance with CCR title 27,¹⁹ then the Discharger is required to comply with applicable financial assurance requirements of CCR title 27, section 22212(a) by ensuring that the financial assurance mechanisms name the San Diego Water Board as beneficiary and the funds can be made directly available to the San Diego Water Board when it finds that the Discharger is unwilling or unable to implement closure, post-closure monitoring and maintenance, or corrective actions in response to a reasonably foreseeable release from the Landfill. Financial assurance instruments that do not provide the San Diego Water Board direct access to funds are unacceptable.
- b. The funds in the financial assurances mechanism is regularly updated, at least every five (5) years, to ensure that adequate funds are available for implementation of closure, post-closure monitoring and maintenance, or corrective action.

¹⁹ Financial assurance requirements for CalRecycle are found in the following sections of California Code of Regulations, CCR title 27: for Closure, Sections 22205 & 22206; for Post-Closure Maintenance, Sections CCR title 27, sections 22210 – 22212; for operating liability, sections 22215, 22216; for Corrective Action, sections 22220, 22221, 22222.

5. **PROPER OPERATION AND MAINTENANCE.**

The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Dischargers to achieve compliance with the specifications of this Order. Proper maintenance includes effective performance of the Landfill cover system, appropriate Best Management Practices (BMPs) for the control of erosion and runoff, and operation of the dewatering system, as needed, for stability of the Landfill.

6. **REVISION OF WASTE DISCHARGE REQUIREMENTS.**

This Order may be modified, revoked and reissued, or terminated for cause including, by not limited to, the following:

- a. Violation of any term or condition of this Order.
- b. Obtaining this Order by misrepresentation or failure to fully disclose all relevant facts.
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- d. A material change in the discharge of wastes into the Landfill.

The filing of a request by the Discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. **CHANGE IN OWNERSHIP.**

This Order is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Water Code. The Discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage under ***Reporting Requirement I.16***. The Discharger shall also inform the transferee of the status of the Discharger's annual fee account. When the Discharger notifies the San Diego Water Board of a transfer of ownership, the notification shall include a proposed schedule for the succeeding owner to provide evidence of acceptable financial assurance responsibility to the San Diego Water Board.

8. **PROPERTY RIGHTS.**

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability

under federal, State, or local laws, nor create a vested right for owner and operator to continue the regulated activity.

9. ENTRY AND INSPECTION.

Under the authority of Water Code section 13267(c), the Discharger shall allow the San Diego Water Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the Discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order.
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order.
- c. Inspect at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the Water Code, any substances or parameters at any location.
- e. Photograph or videotape any structures, facilities, activities, or other conditions that could result in adverse impacts to water quality and that are pertinent to compliance with this Order.

10. REPOSITORY FOR WASTE DISCHARGE REQUIREMENTS.

A complete and correct copy of this Order will be maintained at the local offices of the Discharger, and shall be available to monitoring and maintenance personnel at all times.

11. DISCHARGE OF DECOMMISSIONED MATERIALS.

A moratorium on the disposal of material from decommissioned sites into Class III and unclassified waste management units is established under Executive Order D-62-02.²⁰ This moratorium shall remain in effect until both of the following conditions are satisfied:

- a. Department of Public Health completes its assessment of the public health and environmental safety risks associated with the disposal of

²⁰ Executive Order No. D-62-02, issued by the Governor, directs the SWRCB and the Regional Boards to impose a moratorium on the disposal of decommissioned materials into Class III and unclassified waste management units, which will remain in effect until the Department of Health Services (DHS) completes its assessment of the public health and environmental safety risks associated with the disposal of decommissioned materials and its regulations setting dose standards for decommissioning take effect.

decommissioned materials, and its regulations setting dose standards for decommissioning take effect.

- b. The San Diego Water Board rescinds Cleanup and Abatement Order No. R9-2002-0330.²¹

12. HAZARDOUS SUBSTANCES.

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance, or sewage, to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Office of Emergency Services, the State Water Board, or the San Diego Water Board. This provision does not require reporting of any discharge of less than a reportable quantity as provided under section 13271 subdivisions (f) and (g) of the Water Code, unless the Discharger is in violation of a prohibition in the applicable Water Quality Control Plan.²² This provision does not authorize a violation of the federal Clean Water Act section 301 or Water Code section 13260.

13. HAZARDOUS WASTE EXCLUSION PROGRAM.

The Discharger shall implement a hazardous waste exclusion program pursuant to CCR title 27, section 20870, and 40 CFR section 258.20, and shall comply with any additional load inspection requirements imposed by the LEA with jurisdiction over the facility.

14. PETROLEUM RELEASES.

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Office of Emergency Services, the State Water Board, or the San Diego Water Board. This provision does not require reporting of any discharge of less than 42 gallons, unless the discharge must be reported pursuant to section 311 of the Clean Water Act, or the discharge is in violation of a prohibition in the applicable Water Quality Control

²¹ Cleanup and Abatement Order No. R9-2002-0330 for Moratorium on the Disposal Decommissioned Materials to Class III and Unclassified Waste Management Units, adopted by the San Diego Water Board on October 11, 2002.

²² Water Code section 13271(a).

Plan.²³ This provision does not authorize a violation of the federal Clean Water Act section 301 or Water Code section 13260.

15. DISCHARGES TO NAVIGABLE WATERS.

Any person discharging or proposing to discharge to navigable waters from a point source (except for the discharge of dredged or fill materials subject to section 404 of the Clean Water Act and discharges subject to a general National Pollution Discharge Elimination System (NPDES) permit), must file an NPDES permit application with the San Diego Water Board.

16. SEVERABILITY.

The provisions of this Order are severable. If any provision of this Order, or the application of any provision of this Order to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

17. EFFECTIVE DATE.

This Order becomes effective on the date of adoption by the San Diego Water Board. Upon adoption, this Order supersedes Order No. 99-74, as amended.

I. REPORTING REQUIREMENTS

The Discharger shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish, upon request by the San Diego Water Board, copies of records required to be kept by this Order.

1. REPORT OF WASTE DISCHARGE.

The Discharger shall file a Report of Waste Discharger (ROWD) or amendment to the Joint Technical Document, at least **120 days** prior to the following:

- a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.
- b. A significant change in the disposal method, location or volume (e.g., change from land disposal to land treatment).
- c. A change in the type of waste being accepted for disposal.
- d. The addition of a major industrial waste discharge to a discharge of essentially domestic waste, or the addition of a new process or product by an industrial facility resulting in a change in the character or type of waste being discharged.

²³ Water Code section 13272.

- e. Any planned change in the regulated facility or activity, which may result in noncompliance with this Order.
- f. As required for implementation of an Evaluation Monitoring Program²⁴ or Corrective Action Monitoring Program.²⁵

2. PRELIMINARY DESIGN REPORT.

At least **120 days** prior to the beginning of construction for each new construction stage, a preliminary Design Report shall be submitted to the San Diego Water Board and shall include, but not be limited to, the engineered design plans, engineering specifications, and descriptions for all liners and other containment structures, leachate collection and removal components, leak detection system components, precipitation and drainage control facilities, interim covers, and description of ancillary facilities, and all information required by CCR title 27, section 21760(a)(1).

3. FINAL CONSTRUCTION PLAN.

A final construction plan, including project specifications, shall be submitted to the San Diego Water Board at least **30 days** prior to the initiation of construction activities for each new stage of the Landfill. This report shall contain all material specifications and final grading and construction plans, and the results of any field or laboratory tests completed prior to initiation of construction activities.

4. DAILY FIELD REPORTS.

During construction of each stage of the Landfill, the Discharger shall submit Daily Field Reports to the San Diego Water Board, by noon of the following day. The Daily Field Reports shall include observations, photographs, a record of field tests, problems identified during construction, and actions taken to correct the problems, and shall be signed by the CQA officer.

5. FINAL CONSTRUCTION REPORT.

A Final Construction Report shall be submitted to the San Diego Water Board after completion of each stage of construction, and prior to the discharge of waste into the constructed cell. At a minimum, the final construction report shall include the following components:

- a. Final Engineering Report, including but not limited to, as-built plans, specifications, and descriptions for all liners and other containment structures, LCRS components, leak detection system components, precipitation and drainage control facilities, interim covers, and a description of ancillary facilities as required by CCR title 27, section 21760(a)(1).

²⁴ Pursuant to the requirements found in CCR title 27, section 20425.

²⁵ Pursuant to the requirements found in CCR title 27, section 20430.

- b. Final Construction Quality Assurance (CQA) Report with a written summary of the CQA program and all test results, analyses, and copies of the inspector's original field notes, and a certification as described in CCR title 27, section 20324 *et seq.*

6. **SIGNIFICANT MAINTENANCE ACTIVITY WORKPLAN.**

The Discharger shall submit a workplan prior to any significant maintenance activities that could alter the existing surface drainage patterns or change existing slope configurations. These activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells, and other devices for site investigation purposes constitute significant maintenance activities. Unless otherwise directed by the San Diego Water Board, the Discharger may initiate the activities proposed in the workplan after expiration of **30 days** since the San Diego Water Board received the workplan.

7. **ON-SITE RECORD KEEPING.**

The Discharger shall retain and have available for review by the San Diego Water Board during normal business hours, at a location at or near the Landfill, the following documents and records:

- a. Inspection records, training procedures, and notification procedures required by this Order and CFR title 40, section 258.20.
- b. Any Landfill design documentation for placement of leachate or gas condensate as authorized by this Order and CFR title 40, section 258.28(a)(2).
- c. Any demonstration, certification, finding, monitoring, testing, or analytical data as required by this Order, CCR title 27, and CFR title 40, subpart E, section 258.50, *et seq.*
- d. Closure and post-closure maintenance plans, and any monitoring, testing or analytical data as required by this Order, CCR title 27, and CFR title 40, sections 258.60 and 258.61.
- e. Any cost estimates and financial assurance documentation as required by this Order, CCR title 27, and CFR title 40, subpart G, section 258.70 *et seq.*
- f. Certifications from the generator that the analyses submitted are representative of the material to be disposed.
- g. Analytical data or Material Safety Data Sheets representative of the waste stream.
- h. The Chain-of-Custody form(s) showing the sample's integrity was not compromised.

- i. The approximate volume (in cubic yards) of the waste(s) and the transporter's information.
- j. Any information required by CFR title 40, section 258.29(a)(4) (placement of leachate or landfill gas condensate as allowed by CFR title 40, section 258.28(a)(2) and this Order), section 258.29(a)(6) (closure and post closure plans and monitoring, testing, or analytical data as required by CFR title 40, sections 258.60 and 258.61), and section 258.29(a)(7) (any cost estimates and financial assurance documentation required by CFR title 40, subpart G).
- k. Notifications from the Discharger required pursuant to CCR title 27, sections 21710(a)(4) and 21710(c), and this Order.
- l. Records required to be kept in compliance with CCR title 27, section 21720(f).
- m. The JTD and any amendments thereto prepared pursuant to CCR title 27, section 21585(a)(4) and any additional records and certifications required to be kept in compliance with this Order.

8. **METHANE AND OTHER LANDFILL GASES.**

The City of San Diego Local Enforcement Agency (City LEA) has prescribed a landfill gas (LFG) monitoring program for the Landfill. The Dischargers shall implement the requirements prescribed by the City LEA, and provide copies of all LFG monitoring data and reports to the San Diego Water Board.

9. **MONITORING AND REPORTING PROGRAM.**

Pursuant to Water Code section 13267, and CCR title 27, section 20385, the Discharger shall comply with **M&RP No. R9-2018-0069**. Failure to comply with M&RP No. R9-2018-0069 may subject the Discharger to civil liability pursuant to Water Code section 13268.

10. **MONITORING WELLS.**

The Discharger shall comply with all notice and reporting requirements of the California Department of Water Resources, and with any agency well-permitting requirements imposed by a local agency regarding the construction, alteration, destruction, maintenance, or abandonment of any monitoring wells used for compliance with this Order and **M&RP No. R9-2018-0069**, as required under Water Code sections 13750 and 13755, and local agency requirements.

11. **REPORTING OF ENDANGERMENT OF HEATH AND ENVIRONMENT.**

The Discharger shall report any noncompliance which may endanger human health or the environment. Any such information shall be provided orally to the San Diego Water Board **within 24-hours** from the time the Discharger becomes aware of the circumstances. A written report of the noncompliance shall also be provided within **5 days** of the time the Discharger becomes aware of the circumstances. The written

report shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and whether or not the noncompliance has been corrected, the anticipated time the noncompliance is expected to continue (if not already corrected), and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the Board has deemed the oral report sufficient.

12. REPORTING OF SLOPE FAILURE.

The San Diego Water Board shall be *immediately* notified of, and the Discharger shall promptly repair, any failure that threatens the integrity of containment structures, or structures that control surface drainage or erosion, groundwater monitoring wells, or the landfill gas collection system. A written summary of the actions that were implemented to correct the slope failure shall be prepared and submitted with the next semi-annual groundwater monitoring report.

13. REPORTING OF SEEPAGE FROM THE LANDFILL.

The Discharger shall *immediately* report by telephone or e-mail, the discovery of any previously unreported seepage from the Landfill. A written report shall be filed with the San Diego Water Board within **7 days** of the discovery of the seepage, containing at least the following minimum information:

- a. A map showing the location(s) of the seepage.
- b. An estimate of the flow rate.
- c. A description of the nature of the discharge (e.g., all pertinent observations and analyses).
- d. Analytical data obtained from a sample of the seep if a sample can be obtained.
- e. The corrective measures proposed to eliminate the seep.

14. REPORTING OF LEACHATE PRODUCTION OR CHANGE IN PRODUCTION.

Pursuant to CCR title 27, section 21710(c)(3), the Discharger shall notify the San Diego Water Board within **7 days** if fluid is detected in any unsaturated zone monitoring system (i.e., landfill gas migration monitoring probes), or if a progressive increase is detected in the volume of fluid in any unsaturated zone monitoring system.

15. INCOMPLETE REPORTS.

Where the Discharger becomes aware that it failed to submit any relevant facts or submitted incorrect information in a ROWD or JTD, groundwater monitoring report, Design Report, CQA Report, or any other report submitted to the San Diego Water

Board, the Discharger shall promptly submit the additional facts or corrected information.

16. CHANGE IN OWNERSHIP.

The Discharger shall notify the San Diego Water Board in writing at least **30 days** in advance of any transfer of the property to a new owner. The notification shall include an acknowledgement that the current owner is liable for violations of the Order up to the date of transfer, and that the new owner is liable for any violations after the date the ownership of the property transfers. The notification shall include an acknowledgement signed by the new owner that the new owner accepts responsibility for compliance with this Order, including financial assurances as the State may require, for implementation of maintenance and monitoring of the Landfill.

17. REPORTING DECLARATION.

All applications, reports, or information submitted to the San Diego Water Board are part of the public record and shall be signed and certified as follows:

- a. A Report of Waste Discharge and JTD shall be signed as follows:
 - i. *For a corporation – by a principal executive officer of at least the level of vice president.*
 - ii. *For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.*
 - iii. *For a municipality, or State, federal, or other public agency – by either a principal executive officer or ranking elected official.*
- b. All other reports required by this Order and any other information required by the San Diego Water Board shall be signed by a person designated in paragraph (a) of this section, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - i. *The authorization is made in writing by a person described in paragraph (a) of this provision.*
 - ii. *The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.*
 - iii. *The written authorization is submitted to the San Diego Water Board.*

The authorization, in the form of a Signature Authority Statement, shall be submitted to the San Diego Water Board within **30 days** from either (1) adoption of this Order, or (2) a change in the duly authorized representative.

- c. Any person signing a document pursuant to this section shall make a certification statement regarding the accuracy and authenticity of the information provided in the document. The certification statement shall be included as part of the transmittal letter submitted with any document referenced herein. The certification statement shall read as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."

18. DUTY TO USE LICENSED PROFESSIONALS.

Pursuant to CCR title 27, sections 20950(b), 20324(b), and 20324(d), any report submitted in compliance with CCR title 27 and this Order, which documents design specifications for containment systems, monitoring systems, and storm water control systems, shall be approved by a professional civil engineer or a certified engineering geologist appropriately licensed by the State of California.

The Discharger shall provide documentation that plans and reports required under this Order are prepared by or under the direction of, appropriately qualified professionals. CCR title 27, sections 20324(b) and (d), 20950(b), and 21090(b)(1)(C); and the California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction of licensed professionals. A statement of qualifications and license numbers of the responsible lead professionals shall be included in all plans and reports submitted by the Discharger. The lead professional shall sign and affix their license stamp to the report, plan, or document.

19. REPORT SUBMISSION PROCEDURES.

The Discharger shall submit all paper or electronic copies of reports and notifications required under this Order, including those required under **M&RP No. R9-2018-0069**, and any other information requested by the San Diego Water Board, via email to:

California Regional Water Quality Control Board, San Diego Region
sandiego@waterboards.ca.gov
Attn: Groundwater Protection Unit Supervisor

Larger documents shall be divided into separate files at logical places in the report to keep the file sizes under 150 megabytes. The Discharger shall continue to

provide a paper transmittal letter, a paper copy of all figures larger than 8.5 inches by 14 inches (legal size), and an electronic copy (on a CD or other appropriate media) of all reports to the San Diego Water Board. Unless directed otherwise by the Executive Officer, all correspondence and documents submitted to the San Diego Water Board shall include the reference code “**259845: Land Discharge Supervisor**” in the header or subject line.

The Discharger shall also upload all reports into the GeoTracker database in accordance with this Order, including those required by **M&RP No. R9-2018-0069** (See **M&RP No. R9-2018-0069, Part III.E.3 – Electronic Data Submittals**).

J. DECLARATIONS BY THE SAN DIEGO WATER BOARD

1. ENFORCEMENT ACTIONS.

Pursuant to Water Code section 13350(a), any person who is in violation of any WDRs, or prohibition issued, reissued, or amended by the San Diego Water Board, or who discharges waste, or causes or permits waste to be deposited where it is discharged into the waters of the State, shall be liable civilly under Water Code section 13323, and remedies may be proposed, in accordance with Water Code sections 13350(d) and (e).

2. ENFORCEMENT, INCLUDING PENALTIES, FOR VIOLATIONS.

The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this Order. Water Code section 13350 provides that any person who intentionally or negligently violates any WDR issued, or amended by the San Diego Water Board, is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 100 dollars per day of the violations. Water Code section 13268 further provides that failure or refusal to submit technical or monitoring program reports required by this Order, is subject to administrative civil liability of up to 1,000 dollars per day of the violation. Higher monetary penalties are available through judicial enforcement of violations.

3. OTHER REGULATIONS.

The Discharger may be subject to additional federal, State, or local regulations.

4. ADMINISTRATIVE REVIEW BY THE STATE WATER BOARD.

Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320, and title 23, section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, Sacramento, CA 95812) **within 30 days** of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

5. **DEFINITIONS.**

Definitions of terms used in this Order shall be as set forth in CCR title 27, section 20164, and in Water Code section 13050.

6. **DELEGATION OF AUTHORITY.**

The San Diego Water Board has delegated to the Executive Officer by resolution, all the powers and authority that may be delegated pursuant to Water Code section 13223. The San Diego Water Board intends for the Executive Officer to make modifications or revisions in appropriate cases, to **M&RP No. R9-2018-0069**.